Executive Committee Biosketch

CHAIR - Katherine von Stackelberg

Katherine von Stackelberg specializes in developing risk-based tools and methods to support sustainable approaches to environmental decision-making. She is a Principal at E Risk Sciences, LLP and holds a non-teaching research affiliation at the Harvard Center for Risk Analysis, part of the Harvard School of Public Health, where she is Co-Leader of the Superfund Research Translation Core. In that capacity, she is responsible for developing outreach strategies and materials across diverse stakeholders to communicate the public health and policy implications of basic research. Much of her work has focused on incorporating quantitative uncertainty analysis (e.g., analytical, probabilistic, and fuzzy methods) into the environmental management process, and she has been at the forefront of the effort to explore methods for effectively communicating and interpreting uncertainty in scientific analyses to support environmental decision-making. Dr. von Stackelberg has managed and served as technical lead for several large US EPA and US Army Corps of Engineers projects focused on contaminated sediments. She is an experienced modeler, and served as technical lead for the development of several aquatic food web models used to support risk-based decision making for the Corps and US EPA, including *FishRand*, *FishRand-Migration*, and *TrophicTrace* (http://el.erdc.usace.army.mil/trophictrace/). Dr. von Stackelberg is an advocate of decision analytic approaches for supporting decision-making by integrating environmental models, stakeholder preferences, and GIS-based data and modeling. She is involved in developing approaches to quantify changes in ecosystem services, and identifying relationships between ecosystem services and expected benefits with the goal of integrating economics and risk assessment to better quantify the benefits of proposed risk reductions as a result of management or regulatory actions for use in cost-benefit, cost-effectiveness, and value of information analyses. Dr. von Stackelberg serves as peer reviewer for numerous journals, and is on the editorial boards of *Human and Ecological Risk Assessment* and *Risk Analysis*. She is the Chair of the global Science Committee for the Society for Environmental Toxicology and Chemistry (SETAC), and the outgoing Chair of the North America Science Committee. She is the incoming Treasurer for the Society for Risk Analysis. She is a member of the Scientific Advisors on Risk Assessment for the European Commission in Brussels. Dr. von Stackelberg received an A.B. *cum laude* from Harvard College, and a Sc.M. and Sc.D. from the Harvard School of Public Health in Environmental Science and Risk Management.

Edward W. Carney

Edward W. Carney is an Associate Fellow and Senior Science Leader of Toxicology and Environmental Toxicology & Consulting at The Dow Chemical Company. He has extensive experience in regulatory toxicity testing as well as mechanistic toxicology research, with over 80 publications to date in areas such as *in vitro* alternatives, developmental toxicokinetics and chemical mixtures. In 2010, he led the creation of Dow's new Predictive Toxicology Center, which he continues to direct. Dr. Carney also is engaged in numerous scientific service activities, including: US EPA Board of Scientific Counselors, Teratology Society (President), Society of Toxicology (Past-President, Reproductive & Developmental Toxicology Specialty Section), Toxicology Forum, ILSI-HESI, the Human Toxicology Project Consortium, University of Michigan (adjunct faculty), and University of Surrey (lecturer). He previously served on the National Toxicology Program Board of Scientific Counselors (2007-2010), chairing the Reproductive & Developmental Toxicology Criteria Working Group. He holds a BS in Animal Science from Cornell University, an MS in Reproductive Biology from Univ. Wisconsin-Madison, and a PhD in Reproductive Physiology from Cornell. Prior to joining Dow, Dr. Carney also conducted postdoctoral research in molecular developmental biology at Mount Sinai Hospital Research Institute in Toronto.

Susan E. Cozzens

Dr. Cozzens is Professor of Public Policy, Director of the Technology Policy and Assessment Center, and Associate Dean for Research in the Ivan Allen College. Dr. Cozzens's research interests are in science, technology, and innovation policies in developing countries, including issues of equity, equality, and development. She is active internationally in developing methods for research assessment and science and technology indicators. Her current projects are on water and energy technologies; nanotechnology; social entrepreneurship; pro-poor technology programs; and international research collaboration. From 1998 through 2003, Dr. Cozzens served as Chair of the Georgia Tech School of Public Policy. From 1995 through 1997, Dr. Cozzens was Director of the Office of Policy Support at the National Science Foundation. The Office coordinated policy and management initiatives for the NSF Director, primarily in peer review, strategic planning, and assessment. Before joining Georgia Tech, Dr. Cozzens spent eleven years on the faculty of Rensselaer Polytechnic Institute. Dr. Cozzens has served as a consultant to the Committee on Science, Engineering, and Public Policy of the National Research Council, Office of Science and Technology Policy, National Science Foundation, Institute of Medicine, Office of Technology Assessment, General Accounting Office, National Cancer Institute, National Institute on Aging, the National Institutes of Health, and the National Institute on Occupational Safety and Health. She has served on advisory committees for the Institute of Medicine, National Academy of Sciences, the American Association for the Advancement of Science, the National Academy of Sciences, and the Office of Technology Assessment. Dr. Cozzens has a distinguished record of service, funding, and publication in the fields of science policy and science and technology studies. Her Ph.D. is in sociology from Columbia University (1985) and her bachelor's degree from Michigan State University (1972, *summa cum laude*). She is a recipient of Rensselaer's Early Career Award, a member of Phi Beta Kappa and Phi Kappa Phi, and a Fellow of the American Association for the Advancement of Science.

Lisa Dilling

Dr. Dilling is Assistant Professor of Environmental Studies, a Fellow of the Cooperative Institute for Research in Environmental Sciences (CIRES) and a member of the Center for Science and Technology Policy Research at the University of Colorado, Boulder. She studies decision making, the use of information and science policies related to climate change, adaptation, and carbon management. Her current projects include studying decision making involving drought in urban water systems and evaluating public lands management in the context of climate change. Her career has spanned both research and practice arenas of the science-policy interface, including program leadership for NOAA and the U.S. Global Change Research Program. She has authored numerous articles and is co-editor of the book, "Creating a Climate for Change: Communicating climate change and facilitating social change" from Cambridge University Press. She received her PhD in Biological Sciences from the University of California, Santa Barbara.

Henry Falk

Dr. Falk was most recently the Acting Director for the National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (NCEH/ATSDR). He retired from CDC on 12/31/10. In 1999, Dr. Falk was appointed as ATSDR Assistant Administrator, and in 2003, he was appointed Director for both the National Center for Environmental Health, CDC and the Agency for Toxic Substances and Disease Registry when they were consolidated. From 2004 to January 2010, he served as Director of the Coordinating Center for Environmental Health and Injury Prevention at CDC. Before that time, Dr. Falk was director of the Division of Environmental Hazards and Health Effects at CDC for 14 years. Dr. Falk earned his medical degree from the Albert Einstein College of Medicine in 1968. He received a master's degree from the Harvard School of Public Health in 1976, and he is board certified in pediatrics and in public health and general preventive medicine. Dr. Falk arrived at the CDC in 1972 and is a 30-year veteran of the U.S. Public Health Service Commissioned Corps. This service culminated with his being named Rear Admiral and Assistant U.S. Surgeon General. Highlights of Dr. Falk's work include contributions to the federal responses to Three Mile Island, Mount St. Helens, Hurricanes Hugo and Andrew, the September 11th attacks, and Hurricane Katrina. In the 1980s, he was instrumental in starting the injury prevention programs at CDC. He has authored or coauthored more than 140 publications and has received numerous awards, including the Vernon Houk Award for Leadership in Preventing Childhood Lead Poisoning, the American Public Health Association's Homer C. Calver Award in environmental health, CDC's William C. Watson, Jr. Medal of Excellence, and the Distinguished Service Award from the U.S. Public Health Service. Dr Falk currently serves as a consultant to the Deputy Director, ONDIEH, CDC for global health issues related to non-communicable diseases, injuries and environmental health; he is also Adjunct Professor of

Environmental Health at the Rollins School of Public Health, Emory University.

Charles N. Haas

Dr. Haas is the L.D. Betz Professor of Environmental Engineering and head of the Department of Civil, Architectural and Environmental Engineering, at Drexel University, where he has been since 1991. He directs the Drexel Engineering Cities Initiative. He also has an adjunct appointment in the Department of Emergency Medicine of the Drexel University College of Medicine. He received his BS (Biology) and MS (Environmental Engineering) from the Illinois Institute of Technology and his PhD in Environmental Engineering from the University of Illinois at Urbana-Champaign. He has served on the faculties of Rensselaer Polytechnic Institute and the Illinois Institute of Technology prior to joining Drexel. He co-directs the USEPA/DHS University Cooperative Center of Excellence – Center for Advancing Microbial Risk Assessment (CAMRA). He is a fellow of the American Academy for the Advancement of Science, the Society for Risk Analysis, the American Society of Civil Engineers and the American Academy of Microbiology. He is a Board Certified Environmental Engineering Member by eminence of the American Academy of Environmental Engineers. For over 30 years, Professor Haas has specialized in the assessment of risk from and control of human exposure to pathogenic microorganisms, and in particular the treatment of water and wastewater to minimize microbial risk to human health. Professor Haas has served on numerous panels of the National Research Council. He is a past member of the Water Science and Technology Board of the National Academies.

Earthea A. Nance

Dr. Earthea Nance is an assistant professor at the University of New Orleans. She holds a Ph.D. degree from Stanford University in civil and environmental engineering, as well as B.S. and M.S. degrees in civil and environmental engineering from the University of California-Davis. Originally from San Francisco, Dr. Nance first came to New Orleans as a Hurricane Katrina volunteer with the People's Environmental Center. She subsequently joined the city's recovery office as a Ford Foundation Loaned-Executive to provide expertise in disaster mitigation and environmental management. During her three-year tenure Dr. Nance raised and managed over $59 million in recovery-related grants for New Orleans, established hazard mitigation and alternative energy units in city government, and created a citywide sustainability plan known as GreeNOLA. As a scholar, her research interests are environmental hazards, urban infrastructure, and community participation, especially in complex settings such as post-disaster and high-hazard areas, vulnerable communities, and developing countries. Dr. Nance's recent research deals with the impact of disasters on social and ecological diversity, policies for adapting to hurricane risk under climate change, training executives and officials in resilience and risk management, community-based environmental monitoring, and participatory water and sanitation systems. Dr. Nance's most recent research support has been from the National Oceanic and Atmospheric Administration (in collaboration with the Rand Corporation) on adaptation to future hurricane risk under climate change uncertainty; from the National Science Foundation (in collaboration with Tulane University) on the impact of trauma on urban ecological and social diversity; from the Federal Emergency Management Agency on executive education in disaster resilience; from the Greater New Orleans Foundation (in collaboration with the Louisiana Bucket Brigade) on community-based air monitoring in Gulf Coast communities; and from The World Bank on industrial and solid waste management in Pakistan. Dr. Nance is a board-licensed professional civil engineer and a certified flood plain manager with over 15 years of environmental engineering practice. She currently serves on the National Academy of Science Committee on Levees and Flood Insurance, and on the EPA Science Advisory Board (environmental engineering committee). Dr. Nance's forthcoming book is a case study of innovative participatory development practices in Brazil's urban sanitation sector.

Diane E. Pataki

Dr. Pataki is an ecologist who studies the influence of vegetation on the physical environment and the implications for urban sustainability. Her research focuses on the influence of urban and human-dominated ecosystems on hydrology, water resources, greenhouse gases, and climate with measurements of plant physiology, ecohydrology, soil processes, and atmospheric composition. She has studied tree planting programs, landscape water use, greenhouse gas emissions, and climate change mitigation options in Salt Lake City, Utah and the Los Angeles metropolitan area. She received a B.A. in environmental science from Barnard College, an M.S. and Ph.D. in ecology from Duke University, and post-doctoral training at the Desert Research Institute in Nevada and the University of Utah in Salt Lake City. From 2004-2012 she was on the faculty of the University of California, Irvine where she was the founding director of the Center for Environmental Biology and the Steele Burnand Anza-Borrego Desert Research Center. She is currently on the faculty of the University of Utah as an Associate

Professor of Biology and an Adjunct Associate Professor of City and Metropolitan Planning. She has served on several advisory boards and committees including, the editorial board of the journal Global Change Biology, the Science Committee of the Ecological Society of America, the U.S. Climate Change Science Program Carbon Cycle Scientific Steering Group, and is a fellow of the American Geophysical Union.

Dennis J. Paustenbach

Dr. Paustenbach is a board-certified toxicologist, industrial hygienist and chemical engineer with nearly 35 years of experience in risk assessment, environmental engineering, ecotoxicology, and occupational health. He is currently the President of ChemRisk, Inc., a 75 person consulting firm which specializes in human and ecological risk assessment, as well as the risk analysis of Pharmaceuticals and food. He was previously a Vice President of Exponent, and prior to that, President and Chief Executive Officer (CEO) of McLaren-Hart Environmental, a nationwide consulting firm of 600 persons. In 1985, he founded ChemRisk, perhaps the nation's largest non-governmental human and ecological risk assessment group. Dr. Paustenbach has conducted nearly 1,000 different risk assessments during his career. These have addressed contaminated soils and sediments, air and water emissions, contaminated foods, contaminated crops, and literally hundreds of workplace conditions. He has provided expert witness testimony in public meetings and trials concerning the health effects of chemicals in various media. Dr. Paustenbach has been an invited technical reviewer for prominent journals and of proposed regulations (both in the US and abroad). He has published approximately 300 peer-reviewed articles and written nearly 400 book chapters in the fields of industrial hygiene, human and aquatic toxicology, engineering, and risk assessment. His textbooks on risk assessment are among the most popular ever published and they have been adopted at a number of universities. He has served on nearly 25 science advisory boards during his career. He has been an adjunct professor at several universities and is currently lecturing at the University of Michigan.

Rosemarie Szostak

Dr. Szostak advises companies on technology and innovation in materials, energy and environmental sustainability, and advanced technologies. With more than 20 years of experience as a thought leader and analyst with broad technical knowledge, she provides innovative solutions to difficult technology challenges. Before joining Nerac, Dr. Szostak managed the Philip Morris USA Environmental Footprint Program, assessing corporate operational environmental sustainability needs and leading efforts to reduce the company's environmental footprint. Dr. Szostak also was a program manager for defense sciences at the U.S. Department of Defense's Defense Advanced Research Projects Agency (DARPA), where her role was to identify and advance radically new technologies that promised to enhance national security and lead to revolutionary new military capabilities. As a technology expert at the Army Environmental Policy Institute, she coordinated the response to a Presidential task force on the use of depleted uranium and its role in Gulf War Illness. Dr. Szostak spearheaded the DoD directive on sustainable ranges that changed the way the military trains so that it could do so in an environmentally sustainable manner. She was a professor in the Clark Atlanta University Department of Chemistry and a principal research scientist at the Georgia Tech Research Institute. Dr. Szostak earned her doctoral degree in chemistry at University of California Los Angeles and was a post-doctoral fellow in chemical engineering at Worcester Polytechnic Institute.

John P. Tharakan

Dr. Tharakan is Professor of Chemical Engineering at Howard University, where he has established an extensive record of teaching, research, and service since he joined the University in August 1990. He has served as Chair of the Department of Chemical Engineering, Director of its Graduate Studies Program, Chair of its Educational Programs and Policies Assessment Committee for program accreditation purposes and he also directs the department's Biochemical and Bioenvironmental Engineering Research Laboratory, where he conducts research on bioremediation of hazardous compounds. Dr. Tharakan serves as Faculty Advisor to Howard University's Student Chapter of Engineers Without Borders-USA, and is also an elected member of the Faculty Leadership Council of EWB-USA. He recently lead the Howard Student Chapter on a project implementation site-visit to Choimim, Kenya, where engineering students constructed biosand filters to provide clean water and installed rainwater harvesting tanks to improve water storage capacity in this water-scarce rural community in the highlands of northwest Kenya. He has served as Senior Fulbright Research Scholar to India in 2006-07, focused on documentation of biological waste treatment and management technologies in south India, while affiliated with The New College of the University of Madras, Chennai, India. During his Fulbright year, Dr. Tharakan delivered lectures at numerous other universities, colleges and research institutions across southern India, including the Indian Institute of Technology, Madras and the Indian Institute of Science, Bangalore. Dr. Tharakan also serves as

organizing Chair or Co-Chair of a series of international conferences and national symposia on Appropriate Technology (http://www.appropriatetech.net) bringing together researchers, academics, practitioners, governments and NGO's to promote knowledge and technology sharing and transfer, focused on appropriate technologies for sustainable development. Dr. Tharakan has made significant contributions to engineering education, incorporating ethics and service learning as integral curricular components of his engineering courses and of his pedagogy as an engineering educator, with specific focus on bio-environmental engineering and appropriate technology education and research.

Russell S. Thomas

Dr. Thomas is the Director of the Institute for Chemical Safety Sciences at The Hamner Institutes for Health Sciences in Research Triangle Park. At the institute, Dr. Thomas manages a research program focused on developing methods and approaches for assessing the human health risks associated with chemical exposure. Dr. Thomas' own research laboratory has diverse interests that range from basic research in cancer biology to applied research in chemical risk assessment. Dr. Thomas completed his M.S. in radiation ecology and Ph.D. in Toxicology at Colorado State University. Following his doctoral studies, Dr. Thomas performed postdoctoral research in molecular biology and genomics at the McArdle Cancer Research Laboratory at the University of Wisconsin. Prior to coming to The Hamner, Dr. Thomas worked in the biotech and biopharmaceutical industry.

Marie E. Zhuikov

Ms. Zhuikov is an award-winning science writer, specializing in environmental and medical topics. She has published hundreds of articles, publications, videos and radio programs, and coordinated the production of many web sites. Zhuikov also has extensive experience in media relations for organizations such as Mayo Clinic, the U.S. Forest Service, Sea Grant and the University of Minnesota. She is a published poet and her first novel, "Eye of the Wolf," was published in 2011. Ms. Zhuikov has a BA in science journalism and an MA in public health journalism. She currently works as science communicator for the Wisconsin Sea Grant Institute in Superior, Wisc.